

WEST Search History

DATE: Tuesday, May 25, 2004

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	<i>DB=PGPB; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L6	US-20030136428-A1.did.	1
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<input type="checkbox"/>	L5	L4 and gas	5
<input type="checkbox"/>	L4	L3 and acid	5
<input type="checkbox"/>	L3	L2 and cleaning	33
<input type="checkbox"/>	L2	L1 and (gas ports)	70
<input type="checkbox"/>	L1	electrostatic chuck	5745

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Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 20030136428 A1

Using default format because multiple data bases are involved.

L5: Entry 1 of 5

File: PGPB

Jul 24, 2003

PGPUB-DOCUMENT-NUMBER: 20030136428

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030136428 A1

TITLE: Cleaning process residues on a process chamber component

PUBLICATION-DATE: July 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Krogh, Ole	Belmont	CA	US	

US-CL-CURRENT: 134/28, 134/30, 134/41

Full	Title	Creation	Print	Review	Classification	Data	Reference	Sequences	Attachments	Claims	RWIC	Draw D
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☐ 2. Document ID: US 6337277 B1

L5: Entry 2 of 5

File: USPT

Jan 8, 2002

US-PAT-NO: 6337277

DOCUMENT-IDENTIFIER: US 6337277 B1

TITLE: Clean chemistry low-k organic polymer etch

DATE-ISSUED: January 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Chou: Wen-Ben	Palo Alto	CA		
Dhindsa: Rajinder	San Jose	CA		
Chen: Ching-Hwa	Milpitas	CA		

US-CL-CURRENT: 438/689, 438/704, 438/706, 438/745

ABSTRACT:

A method of cleanly etching an organic polymer layer disposed over a substrate is disclosed. The invention is particularly useful in damascene processing where openings are etched in the organic polymer layer to form interconnects. The method includes lowering the temperature of the substrate. The method also includes flowing H.sub.2 O vapor over the organic polymer layer and condensing (or freezing) the H.sub.2 O vapor on the organic polymer layer. The method additionally includes etching through the organic polymer layer and the condensed H.sub.2 O vapor to form an opening having a side wall. The condensed (or frozen) H.sub.2 O vapor is arranged to form a passivating film (of ice) along the side wall of the opening to protect the side wall from etching.

20 Claims, 7 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 7

Full	Title	Caption	Front	Review	Classification	Date	Reference	Claims	KeyC	Draw D
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3. Document ID: US 5785796 A

L5: Entry 3 of 5

File: USPT

Jul 28, 1998

US-PAT-NO: 5785796
DOCUMENT-IDENTIFIER: US 5785796 A

TITLE: Vacuum processing apparatus, vacuum processing method, and method for cleaning the vacuum processing apparatus

DATE-ISSUED: July 28, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lee; Hideki	Nirasaki			JP

US-CL-CURRENT: 156/345.24, 118/715, 118/719, 134/1.1, 134/1.2, 134/1.3, 156/345.32, 204/298.25, 204/298.32, 204/298.33, 204/298.35, 216/59, 216/63, 216/67, 438/905

ABSTRACT:

A vacuum processing apparatus includes a plurality of vacuum processing chambers for processing a target object using a process gas, a vacuum convey chamber, connected to the plurality of vacuum processing chambers, for loading/unloading the target object into/from the processing chambers, an opening/closing means opened/closed to cause the plurality of vacuum processing chambers to communicate with the vacuum convey chamber, and a cleaning gas supply means for supplying a cleaning gas containing ClF.sub.3 into at least one of the vacuum convey chamber and the plurality of vacuum processing chambers. The cleaning gas is supplied into the plurality of vacuum processing chambers and the vacuum convey chamber communicating with each other by opening the opening/closing means to clean the plurality of vacuum processing chambers and the vacuum convey chamber.

23 Claims, 32 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 16

Pat.	Title	Coln.	Front	Revise	Classification	Date	Reference	Claims	ENC	Draw D.
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☐ 4. Document ID: US 5616208 A

LS: Entry 4 of 5

File: USPT

Apr 1, 1997

US-PAT-NO: 5616208

DOCUMENT-IDENTIFIER: US 5616208 A

TITLE: Vacuum processing apparatus, vacuum processing method, and method for cleaning the vacuum processing apparatus

DATE-ISSUED: April 1, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lee; Hideki	Nirasaki			JP

US-CL-CURRENT: 156/345.24, 118/715, 134/1.1, 134/1.2, 134/1.3, 156/345.29, 156/345.32, 204/298.25, 204/298.32, 204/298.33, 204/298.35, 216/59, 216/63, 216/67, 438/905

ABSTRACT:

A vacuum processing apparatus includes a plurality of vacuum processing chambers for processing a target object using a process gas, a vacuum convey chamber, connected to the plurality of vacuum processing chambers, for loading/unloading the target object into/from the processing chambers, an opening/closing means opened/closed to cause the plurality of vacuum processing chambers to communicate with the vacuum convey chamber, and a cleaning gas supply means for supplying a cleaning gas containing ClF.sub.3 into at least one of the vacuum convey chamber and the plurality of vacuum processing chambers. The cleaning gas is supplied into the plurality of vacuum processing chambers and the vacuum convey chamber communicating with each other by opening the opening/closing means to clean the plurality of vacuum processing chambers and the vacuum convey chamber.

7 Claims, 32 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 16

Pat.	Title	Coln.	Front	Revise	Classification	Date	Reference	Claims	ENC	Draw D.
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☐ 5. Document ID: WO 2003061859 A1, US 20030136428 A1

LS: Entry 5 of 5

File: DWPI

Jul 31, 2003

DERWENT-ACC-NO: 2003-709897

DERWENT-WEEK: 200367

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TITLE: Process residues cleaning method, involves partially immersing electrostatic

chuck component into cleaning, and passing non-reactive gas through holes at high pressure

INVENTOR: KROGH, O

PRIORITY-DATA: 2002US-0056299 (January 23, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 2003061859 A1</u>	July 31, 2003	E	000	B08B003/04
<u>US 20030136428 A1</u>	July 24, 2003		006	B08B003/04

INT-CL (IPC): B08 B 3/04; B08 B 3/08; C23 C 16/44

Pat	Title	Claims	Front	Review	Classification	Date	Reference			Claims	IPC	Draw L
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Term	Documents
GAS	2142186
GASES	439278
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(L4 AND GAS).PGPB,USPT,EPAB,JPAB,DWPI,TDBD.	5

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